

April 13, 2011

Japan Hygiene Products Industry Association

Japan Cleansing Wipes Industry Association

“Product safety in relation to the accident in Fukushima Nuclear Power Plant 1”

It is announced by the government and reported in the mass media, etc. that radioactive substance was detected from a part of drinking water and agricultural products due to the accident that occurred in Fukushima Nuclear Power Plant 1. Such information has caused concern among the consumers about the safety of hygiene cotton, body wipe for babies and adults, wet wipe, wet paper towel, etc. (“hygiene products”). However, for the reasons shown in the following, the Association assures you the consumers that these products can be used without anxiety as you have always done before.

1. These sanitary products are not manufactured within the districts designated for evacuation or the districts designated for voluntary evacuation by the government with consideration to health damage. Therefore, from the viewpoint of manufacturing environment, there is hardly any safety problem at present about the products.
2. Since these sanitary products are continuously manufactured in a consistent line so as to prevent the drying and contamination of products, and packaged under the production environment closely guarded from dust and dirt from outside, it is almost inconceivable that the radioactive substance released in the air is mixed in the products. Even after manufacture, the products are packaged and placed in corrugated board boxes. Therefore, direct mixture of radioactive substance in the products is considered extremely rare.
3. Purified water is used in the manufacture of these sanitary products. In this regard, the Japanese government has given comment that the current radioactive substance level in the tap water causes no problem in daily life use (contact with the skin through bath water, for taking bath, washing hands, face and hair, taking a bath, etc.). Therefore, it is considered that these sanitary products that are used in contact with the skin cause no safety concern.
4. Even if the water that contains radioactive substance at the concentration the same as

the “tentatively prescribed radioactive substance level in drinking water” by Ministry of Health, Labor and Welfare” (300 Bq/kg iodine 131) is used in the product, the value goes down to a level below the standard value during the period from the manufacture, through usual quality test, shipment from plant up to the delivery to the point of sales.

Based on the above reasons, Corporation Japan Hygiene Products Industry Association and Japan Cleansing Wipes Industry Association do not consider that these sanitary products will have any influence on the health of consumers due to the radioactive substance released into the air through the accident in Fukushima Nuclear Power Plant 1 this time.

The member companies of Corporation Japan Hygiene Products Industry Association and Japan Cleansing Wipes Industry Association will pay sufficient attention to the information, etc. released by the government, etc. in the future and proceed with the production activities with priority on the safety of consumers.

Reference materials

“Exposure volume calculated by assuming the mixture of radioactive substance in the products (said sanitary products) (Note 1)

When wet wiper that is a representative product (said sanitary product) is manufactured using raw water that contains 300 Bq/kg of iodine 131.

The amount of radioactive iodine in the product when delivered to the consumer:

$$300 \text{ Bq/kg} \times 0.5 \times 0.5 = 75 \text{ Bq/kg}$$

* 300 Bq/kg: Concentration of iodine 131.

* Half life of iodine 131 is 8 days.

* Assuming that it takes 1 day to purify the raw water (tap water, etc.) by ion exchange processing, etc.

* Assuming that it takes 8 days after the production and filling of products and completion of quality test for shipment from plant.

* Assuming that it takes 7 days for the product to be displayed in shops, etc.

Accordingly, it is assumed to take the minimum 16 days from the raw water procurement until the product reaches the consumer.

Exposure volume in a year when one sheet of this product is used each day:

$$75 \text{ Bq/kg} \times 4 \text{ g/day}/1000 \text{ (converted into unit of kg)} \times 1.6 \times 10^{-5} \text{ mSV/Bq} \times 365 \text{ days} \times 1000 \text{ (converted into unit of } \mu\text{SV)} = 1.7 \mu\text{SV/year}$$

* 75 Bq/kg: The amount of radioactive iodine in the product when it reaches the consumer

* 4 g/day: Amount of drug solution per sheet of product

* 1.6×10^{-5} mSV/Bq: Radiation volume in iodine 131 (effective dose count)

Reference: We are exposed to 2400 μ SV/year (average over the world) from the natural world in the daily life (Note 2).

(Note 1): Oral ingestion is assumed by applying the calculation method applicable to food.

(Note 2): Report made by United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) on the influence of atomic radiation